

BALKANDZHIEV, Rosen, inzh.; TASHKOV, Tashko, inzh.

Some notes on the Bulgarian State Standard 449-61: Transformers
for Electric-Arc Welding with a Single Outlet. Ratsionalizatsiia
13 no.4:29-30 '63.

BALKANDZHI V, R., inzh.

The "star-double star" switch for the K-300 Triodin welded converter. Elektroenergiia 15 no.11;20-21 N '64.

BALKANDZHIEV, Rosen, inzh.

Possibilities for economy of electric power in welding. Elektroenergiia
14 no.5/6:12-16 My-Je '63.

1. TsNIITMash. Sofia.

TASHKOV, Tashko, inzh.; SHLOSER, Boris, inzh.; KHLEBAROV, Vladimir, inzh.;
BALKANDZHIEV, Rosen, inzh.

A new semiautomatic device for welding in the carbon dioxide
protective gas medium. Tekhnika Bulg 13 no.4:19-22 '64

BALKANDZHIEV, R., inzh.; TASHKOV, T., inzh.; KHLEBAROV, V., inzh.;
SHLOSER, B., inzh.; DACHEV, Al.

New rectifier for welding in a carbon dioxide protective gas
medium. Mashinostroeni 13 no.9:12-17 S '64.

1. Central Scientific Research Institute of Technology and
Machinery (for all except Dachev) 2. Scientific Research Institute
for the Design, Development, and Manufacture in Electric Industries
(for Dachev).

BALKANDZHIEV, R., inzh.

New technical books. Mashinostroene 13 no.11:46 N '64.

BALKANDZHIEVA, I.; ATANASOV, T.; KALIAZINA, N.

Effectiveness of the methods for preventive testing of the insulation of electric machines. p. 23.

Spravochnik po tsvetni metali i splavi. Sofia, Bulgaria. Vol. 10, no. 8/9, Aug./Sept. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 9, No. 2, February, 1960. Uncl.

30480
S/146/61/004/005/005/011
D221/D305

16.8000(1031,1103,1329)

AUTHORS: Balkani, D. and Smol'nikov, L.P.

TITLE: Calculating the tuning parameters for a relay regulator with a rigid feedback, operating in intermittent conditions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 4, no. 5, 1961, 66-75

TEXT: An analysis is given of the intermittent operation of a relay controlling slow processes, the arrangement of which is shown in Fig. 1. The object of its control K , is an aperiodic link of the first order with a time constant T_k , for regulating the parameter θ . The control organ CO is actuated by an executive organ EO having a constant speed of rotation. The regulator consists of a relay amplifier P and measuring bridge M. The chopper C switches in the regulator periodically. The author formulates initial equations, considering the chopper as closed, and assuming that the time

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constant of the executive organ and of M is smaller than T_k . To determine the increment of parameter $\Delta\theta_{sr}$ it is assumed that $\theta = \theta^0_{s.r}$ when there is not control. The value of $\Delta\theta_i$ which characterizes the lack of sensitivity (i = insensitivity) of the regulator is given by $\Delta\theta_i = \frac{k}{k + k_c} \cdot \frac{u_{sr}}{k_n}$. This is followed by analy-

sis of step changes in the exciting agent. After mathematical elaborations a set of equations is deduced for the relay function, $F(z)$, where $z = x + \gamma \frac{dx}{dr}$, and $x = \frac{\Delta\theta - \Delta\theta_n^0}{\Delta\theta_n}$, $\gamma = \frac{t}{T_k}$. The automatic

control system is then analyzed with the aid of a three-chart phase plane. In case of thermal energy and chemical objects, $\Delta\theta \ll \theta_k$, and therefore, $x \ll \xi$, as well as $y \ll \xi$. Consequently, it is possible to make the approximation $\frac{dx}{dy} = 0$, and then the phase traj-

ectories in charts II and III are vertical lines. Equations of lines on which phase trajectories pass from one chart to another

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S/146³⁰¹⁸⁰/61/004/005/005/011
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are deduced. Two diagrams of point transformation are given which permit analysis of the automatic control for various initial conditions (one diagram is for closed chopper, the other for interrupting operation of the regulator). Possibilities of a damped transition process and self-oscillations are discussed. The diagram of point transformation allows calculation of the period and plotting the transition process in the case of a step change in the disturbing effect. This article was recommended by the Kafedra avtomatiki i telemekhaniki (Department of Automation and Telemechanics). There are 5 figures and 3 Soviet-bloc references.

ASSOCIATION: Leningradskiy elektrotekhnicheskii institut im.
V.I. Ul'yanova (Lenina) (Leningrad Electrotechnical
Institute im. V.I. Ul'yanov (Lenin))

SUBMITTED: March 8, 1961

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Calculating the tuning...

Fig. 1. Block diagram of the automatic control system: M - measuring bridge; 2 - chopper; 3 - relay; 4 - executive organ; 5 - control organ; k - control object; 6 - measuring instrument.

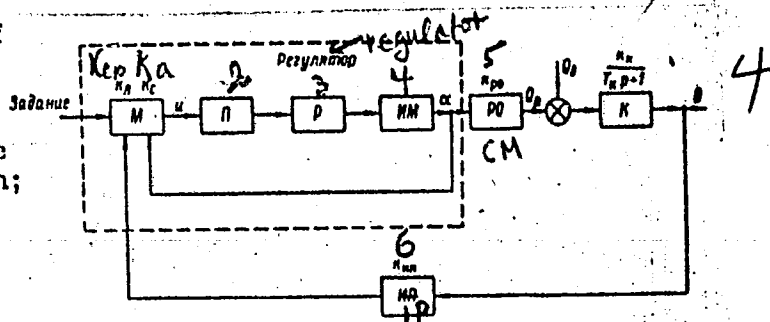


Рис. 1. Структурная схема системы автоматического регулирования:
M - измерительный мост; П - прерыватель; Р - реле; ИМ - исполнительный механизм;
РО - регулирующий орган; К - объект регулирования; ИП - измерительный прибор

Card 4/4

BALKANI, D.; SMOL'NIKOV, L.P.

Calculating tuning parameters of a multiple-point proportional relay
regulator for an object with lagging. Izv.vys.ucheb.zav.; prib.
6 no.1:27-37 '63. (MIRA 16:2)

1. Leningradskiy elektrotekhnicheskiy institut imeni V.I.Ul'yanova
(Lenina). Rekomendovana kafedroy avtomatiki i telemekhaniki.
(Automatic control)

BALKANI, D., aspirant; SMOL'NIKOV, L.P., kand. tekhn. nauk

Approximate point transformation diagram and its use in the
study of the relay controller of a gradual process. Izv.
LETI no.48:212-226 '63. (MIRA 17:12)

8/0271/64/000/001/A025/A025

ACCESSION NR: AR4014682

SOURCE: RZh. Avtomatika, elektromekhanika i vychislitel'naya tekhnika, 1964, no. 1, Abs. 1A168

AUTHORS: Balkani, Dard', and Smol'nikov, L. P.

TITLE: Approximate diagram of point transformation and its use for the study of relay control of slow processes

CITED SOURCE: Izv. Leningr. elektrotekhn. in-ta, vy'p. 48, 1963, 212-226

TOPIC TAGS: automatic control, relay control, slow process, slow process, control, adaptive control system, self-adaptive control system, relay control system, automatic control system

TRANSLATION: A self-adaptive control system (SCS) is examined consisting of 1) a relay control (R) having a constant-rate regulator and a rigid feedback and 2) an object described by an equation which holds for an aperiodic unit with a long time constant. Equations are derived for describing SCS operation, and the operation is then investigated in terms of a three-sheeted phase plane. Simplified phase trajectories are drawn for slow processes. An approximate diagram of the

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point transformation is constructed and used to find the motion of the system for various initial conditions. Together with the usual (single point) mode of R operation, multipoint modes are studied in which a single R is used to control a number of objects. In this case the R operates intermittently. This mode of operation is also studied with the aid of the point transformation diagram. Conditions are determined under which self-oscillation occurs, and parameters are found for the limit cycle. When relay delay is considered, the region of the initial conditions under which self-oscillation occurs becomes larger. Relations are obtained for calculating the tuning of the R which assures a tolerable static control error and an appropriate transient process. Orig. art. has 6 figs. and 3 refs.

A. L.

SUB CODE: GE

ESCL: 00

DATE ACQ: 19Feb64

Card 2/2

NADUDVARI, G.; BALKANI, N.; VEYS, A. [Weis, A.]

New method for decreasing the dust content of air by using wet
mechanical drilling in mines. Gig. i san. 25 no.4:110-112 Ap '60.
(MIRA 13:8)

1. Iz otdeleniya gigiyeny truda Kluzhskogo nauchno-issledovatel'skogo
instituta gigyeny, Rumynskaya Narodnaya Respublika.
(MINE DUSTS) (DUST-REMOVAL)

AUTHOR: Balkanov, A. E.

6-58-3-9/16

TITLE: Some Suggestions Concerning the Perfection of the Friction Transformers Used in Instruments for Topographic Surveys (Nekotoryye predlozheniya po usovershenstvovaniyu friktsionnykh preobrazovateley, primenyayushchikh v instrumentakh dlya topograficheskoy sl'yemki)

PERIODICAL: Geodeziya i Kartografiya, 1958, Nr 3, pp. 43-47 (USSR)

ABSTRACT: At present instruments by which the elevations and the altitudes of the points to be determined can be obtained by means of friction transformers are used to a great extent. To these instruments belong: the altimeter-alidade (kipregel') of G. Yu. Stodolkevich, the altimeter-alidade of M. M. Gubin and others. Most widely spread is the altimeter-alidade BKC-7 (system of G. Yu. Stodolkevich). These devices have many advantages, but also an essential disadvantage: the friction mechanism wears out due to the sliding of the meter roll during the work on the disk. This causes the necessity to repair the mountings of BKC-7 after a fairly short time. The causes of this wear are investigated here and at first the mode of operation of the mechanism is

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Some Suggestions Concerning the Perfection of the Friction 6-58-3-9/16
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described. It is shown that the replacement of the inclined distance by a horizontal one introduces a certain error into the determination of relevation. A mechanism which is free of this error should be created. Such an improvement of the construction for the altimeter-alidade BKC-7 is given here. Beside the sliding through of the roll in relation to the disk the friction surfaces require an especially careful mechanical and thermal treatment which again requires careful handling of the instrument. Two types of transformers free of these deficiencies are described here. There are 4 figures.

AVAILABLE: Library of Congress.

1. Topography
2. Transformers--Friction--Applications

Card 2/2

AUTHOR: Balkanov, A. F.

SOV/6-58-9-4/26

TITLE: A Modernized Level "NP" (Modernizirovanny nivelir "NP")

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 9, pp 27 - 28 (USSR)

ABSTRACT: The level NP is produced by the "Geofizika" plant for use in second-grade leveling. For this purpose it had to be modernized. P.A.Gaydayev, N.I.Nishchenko, A.S.Sapozhnikov, Z.I.Rodina and A.F.Balkanov altered the design of the instrument and changed the color arrangement of the leveling rod. This modernization is briefly described. The new instrument is equipped with a novel reading device which was suggested by P.A.Gaydayev, N.I.Nishchenko and A.S.Sapozhnikov in 1954. This makes possible the reading of tenths of a millimeter. Field testing of this instrument showed that it can be successfully used in second-grade leveling work. There are 2 figures.

Card 1/2

VASMUT, A.S.; PETROV, G.N.; BALKANOV, A.F.; MULIN, A.I.

Concerning the automation of the reproduction of map titles and
point symbols. Geod. i kart. no.1:67-73 Ja '65.

(MIRA 18:3)

ANGELOV, S., akad. prof. d-r.; POPOV, D., prof. d-r.; BALKANSKA, N., d-r.

Seroflocculation reaction of Mandula and its application in diagnosis and control of syphilis. Izv. mikrob. inst., Sofia Vol. 4:41-48 1953.

1. Direktor na Mikrobiologicheskia instituta pri BAN. (for Angelov)
 2. Direktor na Kozhno-venerichna a klinika pri Meditsinskata Akademiia V.Chervenkov. (for Popov)
 3. Nauchen sutrudnik pri Kozhno-venericheskia institut. (for Balkanska)
- (SYPHILIS, diagnosis, serol.)

Balkanska, V.

DONGCHEV, D., STOYANOVA, M., GRIGOROVA, M., BALKANSKA, V., NENKOVA, V.,
DUMANOVA, S.

Parapertussis in kindergartens and nurseries in Sofia. Zhur.
mikrobiol.epid. i immun. 29 no.5:69-74 My '58 (MIRA 11:6)

1. Iz Nauchno-issledovatel'skogo instituta epidemiologii i mikro-
biologii (Sofiya).

(WHOOPING COUGH,
parapertussis in Bulgaria (Rus))

BAKHARSKI, V.

B. A. Vvedenskii, laureate of the A. S. Popov Gold Medal. p. 4.
RADIO. Vol. 5, no. 1, 1956.
Sofia, Bulgaria

SOURCE: East European Accessions List, (EEAL) Library of
Congress, Vol. 6, No. 1, January 1957

BALKANSKI, B.

Episodes from battle. p.3.
ZA RODINATA, Sofya, Vol. 6, no. 1. Jan 1956.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6 June 1956, Uncl.

BALKANSKI, G.

A case of combined anomalies of the urinary system. Khirurgiia
(Sofia) 18 no.3:372-375 '65.

1. VMI, Sofia, Katedra po anatomiia (rukovoditel: prof. D. Kadanov).

BALKANSKI, ST.

Increasing the Circulation Rate of Circulating (Crate) Packings on Canning Enterprises. Leka Promishlenost (Light Industry), #10:5:Oct. 1955

VOL. 4,

BULGARIA

Dr Ivan BALKANSKI and Dr Nikola TYUTYUNDZHIEV [Affiliation not given]

"Proving the Presence of Re-Processed Meat Products in Sausages."

Sofia, Veterinarna Sbirka, Vol 59, No 11, 1962; p 23.

Abstract: Description of the materials and histologic staining method for incontrovertibly proving adulteration of sausage meat by inclusion of old sausage (differential staining of skin particles.) Common stains are used. Photomicrograph.

1/1

BALKANSKI, S.; STAMOV, S.

Effect of prices of raw materials on net cost of products in the cann-
ing industry. p. 4.

LEKA PROMISHLENOST. Vol. 5, No. 1, 1956

Sofia, Bulgaria

So. East European Accessions List

Vol 5, No. 9

September, 1956

BALKANYI, Bertalan, okleveles kozgazdasz; FALLER, Gusztav, okleveles banyamernok; FULMER, Jozsef, okleveles banyamernok

Some interesting data on the Moscow Mining Institute and its research in mining economics. Bany lap 97 no. 5: 334-336 My '64.

1. Ministry of Heavy Industry (for Faller).
2. Mecsek Coal Mining Trust (for Fulmer).

BALKANYI, Gyorgy, okleveles villamosmernok, a muszaki tudomanyok
kandidatusa, adjunktus; BENYO, Zoltan, okleveles villamosmernok,
tanarseged.

Analogue computers. Pt.1. Elektrotechnika 56 no.7/8:325-330
'63.

1. Budapesti Muszaki Egyetem Automatizalasi Tanszek,
Budapest, XI., Egrý József u.18.

BALKANYI, Gyorgy, okleveles villamosmérnök, a muszáki tudományok
kandidátusa, adjunktus; BENYO, Zoltan, okleveles villamosmérnök,
tanársegéd. Elektrotechnika 56 no.9:408-415 s '63.

1. Budapesti Muszáki Egyetem Automatizálási Tanszék, Budapest,
XI., Eötvös József u.18.

BALKANYI, Gyorgy, okleveles villamosmornok, a muszaki tudomanyok kandida-
tusa, adjunktus; BENYO, Zoltan, okleveles villamosmornok, tanarseged

Analogue computers. Pt.3. Elektotechnika 56 no.10:454-463 0 '63.

1. Budapesti Muszaki Egyetem Automatizalasi Tanszek, Budapest, XI.,
Egry Jozsef u.18.

BALKANYI, Gyorgy, okleveles villamosmesternok, a muszaki tudomanyok
kandidatusa, adjunktus.; HENYO, Zoltan, okleveles villa-
mosmesternok, tanarseged.

Analog computers. Elektrotechnika 56 no.11/12:557-564.
N-D'63.

1. Budapesti Muszaki Egyetem Automatizalasi Tanszek,
Budapest, XI., Egly Jozsef u.18.

BALKANYI, I.

⑥

Effect of medication and diet on experimentally produced neurogenic hypertension in rats. M. Händel, P. Kertai, J. Sós, K. Weisz, and I. Balkányi (*Acta physiol. Acad. Sci. hung.*, 1953, 4, 315—322).—The normal blood pressure of 110 mm. Hg rises to above 150 mm. Hg in rats stimulated daily for 40 consecutive days by whistle sound, induction shocks, and strong light for 10 min. each. The neurogenic hypertension persists for 2 to 4 weeks after the cessation of the stimulation. Simultaneous administration of Tetracor (penta-methyletetrazol) increases hypertension. It prolongs the rise. Tetracor alone causes no hypertension. Rats on methionine- and tryptophane-free diets do not develop hypertension by these treatments, but hypertension develops when they are given a complete diet. Hypertension does not develop or is small if Sevalan is given to rats during the 40 days period of stimulation.

A. B. L. DEZNAK.

BODOKY, Gyorgy, Dr.; HETLERI, Istvan, Dr.; FODOR, Istvan, Dr.; BALKANYI, Ivan, Dr.

Siderofibrosis lienis. Orv. hetil. 100 no.14:510-512 5 Apr 59.

1. Az Uzsoki-utcai kórház (ig. Szanto Sandor dr.) I. sz. sebészeti osztályának (foo: Koves Istvan dr.) II. sz. belgyógyászati osztályának (foo: Flamm Sandor dr.) és az ORFI korszerovettani laboratóriumának (foo: Farkas Karoly az orvostudományok doktora) közleménye.

(SIDEROSIS, pathol.

siderofibrosis, histopathol. (Hun))

(SPLEEN, dis.

same)

1. BALKAREY, I. YU., Eng.; SAYAPIN, YU. I., Eng., SEREBIYANT, F. N., Eng.
2. USSR (600)
4. Windlass
7. Modernization of the tractor winch D-148v, Mekh. stroi., 10, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

BALKAREY, V.D.

Prolonged presence of a foreign body in the posterior mediastinum.
Vest.oto-rin. 20 no.5:125-126 S-0 '58 (MIRA 11:12)

1. Iz Oto-rino-laringologicheskogo otdeleniya (zav. L.P. Khersonskiy)
Nikolayevskoy oblastnoy bol'nitsy.
(MEDIATINUM, for. bodies,
shell fragment, prolonged presence (Rus))

L 21573-66 ENT(m)/EWA(d)/EWP(t) JD
ACC NR: AP6011492

SOURCE CODE: UR/0386/66/003/007/0281/0284

AUTHOR: Balkarev, Yu. I.; Khonskiy, D. I.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences, SSSR (Fizicheskii institut Akademii nauk SSSR)

TITLE: Lattice stability in the phononless mechanism of superconductivity

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 7, 1966, 281-284

TOPIC TAGS: superconductivity, critical point, crystal lattice

ABSTRACT: In view of the interest in the feasibility of superconductors with high critical temperatures, the authors consider the effect exerted on the stability of a superconductor lattice if it is assumed that the superconductivity is governed by a direct electron-electron mechanism. It is shown by calculating the polarization operator and by assuming certain physically reasonable values for the energy gap and the interaction constant, that if the superconductivity mechanism is phononless the critical temperature can indeed reach values 10^{-10^3} deg K in substances with weak electron-phonon interaction (such as most metals can be shown to be). The temperature at which the lattice instability first sets in is also higher than the

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critical temperature of the superconducting transition. The authors thank V. L. ²
Ginzburg and L. V. Keldysh for a discussion of the work. Orig. art. has: 8 for-
mulas.

SUB CODE: 20/ SUBM DATE: 01Feb66/ ORIG REF: G04/ OTH REF: 001

Cord 2/2 *U R*

GERGIYENKO, I.N., prof.; BALKAROV, I.M., vrach; SUSLOVA, Ye.M.

Prospects for the use of Dolinskoye salt in treating chronic gastritis and cholecystitis outside a health resort. Uch. zap. Stavr. gos. med. inst. 12:334-335 '63. (MIRA 17:9)

1. Kafedra gospiatal'noy terapii (zav. prof. I.N. Sergiyenko) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

KOVALENKO, Ol'ga Vlas'yevna; BALKAROV, K.Sh., red.; TKHAKAKHOV, B.Zh.,
tekhn. red.

[Orchard diseases and pests in Kabardino-Balkaria] Vrediteli i
bolezni sadov Kabardino-Balkarii. 3.perer.i dop.izd. Nal'chik,
Kabardino-Balkarskoe knizhnoe izd-vo, 1960. 110 p.

(MIRA 15:1)

(Kabardino-Balkar A.S.S.R.—Fruit—Diseases and pests)

KARATSUKOV, Sultan Aliyevich; KOROTKIKH, Aleksey Vasil'yevich;
BALKAROV, K.Sh., red.

[Laboratory control in farm dairies and milk receiving stations; manual for laboratory workers of farm dairies, for the inspectors of state and collective farm administrations, and laboratory workers of creameries and cheese factories] Laboratornyi kontrol' na prifermskikh molochnykh i punktakh priemki moloka; posobie dlia laborantov prifermskikh molochnykh inspektorov kolkhozno-sovkhoznykh upravlenii i laborantov maslosyrozavodov. Nal'chik, Kabardino-Balkarskoe knizhnoe izd-vo, 1963. 49 p.
(MIRA 17:9)

BALKAROV, Magomet Ismailovich; PETUKHOVA, I.T., redaktor; PAPERNAJA, A.A.,
tekhnicheskij redaktor

["Mal'chik" health resort] Kurort "Mal'chik." Izd. 2-os. Mal'chik,
Kabardinskoe knizhnoe izd-vo, 1956. 260 p. (MLRA 10:7)
(NAL'CHIK)

Balkarov, M. I.

BALKAROV, M.I.; RUMICH, V.P.

Problems in using Narzan waters from the Mount El'brus region; on the 400th anniversary of the voluntary annexation of Kabarda to Russia. Vop.kur.fizioter. i lech.fiz.kul't. 22 no.6:63-67 N-D '57.
(MIRA 11:2)

1. Upravleniye kurorta Mal'chik
(MOUNT EL'BRUS--MINERAL WATERS)

BALKAROV, M.I.

Physicochemical and therapeutic properties of a new thermal
mineral water from the Dolinsk Spring no.1. Uch.zap.
KBNII 14:401-418 '58. (MIRA 13:9)
(Dolinsk--Mineral waters)

AKRITAS, P.G.; BALKAROV, M.I.; KEREFOV, K.N.; KOS, Yu.I.; TUAYEV, N.A.;
KUZ'MIN, V.G., red.; KUMUKOVA, S.S., tekhn.red.

[Kabardino-Balkaria; guidebook] Kabardino-Balkaria; putevoditel'.
Nal'chik, Kabardino-Balkarskoe knizhnoe izd-vo, 1960. 186 p.
(MIRA 14:6)

(Kabardino-Balkar A.S.S.R.--Guidebooks)

BALKAROV, M.I.; TUAYEV, N.A.; PETRUKHOVA, I.T., red.; TKHAKAKHOV, B.Zh.,
tekhn. red.

[Mineral waters of the Elbrus region] Natsany El'brusa. Nal'chik,
Kabardino-Balkarskoe knizhnoe izd-vo, 1960. 98 p. (MIRA 14:8)
(Elbrus region--Mineral waters)

AKRITAS, P.G.; BALKAROV, M.I.; KEREFOV, K.N.; KOS, Yu.I. [deceased];
TUAYEV, N.A.; KUZ'MIN, V.G., red.

[Kabardino-Balkaria; a guidebook] Kabardino-Balkaria; pute-
voditel'. Nal'chik, Kabardino-Balkarskoe knizhnoe izd-vo,
1964. 216 p. (MIRA 18:4)

L 23025-66

ACC NR: AP600066*

The proof is based on a system of equations describing the elastic oscillations of the lattice with account of interaction with the electron system, taking into account the electron distribution function, the influence of the lattice vibrations, and the approximate calculation of the lattice elastic strain energy occurring under the conditions of superconductivity. The system of equations was originally considered by V. L. Ginzburg (ZhETF v. 40, 1960) and I. G. Kozik (ZhETF v. 41, 1964, 1965). The system is modified to take into account the properties of the superconductor. The author thanks V. L. Ginzburg, I. V. Keldysh, A. I. Larkin for a discussion and valuable advice. The article has: 1 figure and 23 formulas.

SUB CODE: 20/ SUBM DATE: 26Jul65/ ORIG REF: 006/ OTH REF: 002

Card

2/2

NOVOZHILOVA, M.I.; BALKASHEVA, L.U.

Some data on the problem of the influence of salinity on
microorganisms found in Balpash-Sor lake. Trudy Inst.
mikrobiol. i virus. AN Kazakh. SSR 4:47-52 '61. (MIRA 14:4)
(BALPASH-SOR, LAKE (KAZAKHSTAN)--MICROBIOLOGY)
(SALINITY)

NOVOZHILOVA, M.I.; BALKASHEVA, L.U.

Microbiological characteristics of the water mass of some lakes in
Kokchetav Province. Trudy Inst. mikrobiol. i virus. AN Kazakh.
SSR 4:59-64 '61. (MIRA 14:4)
(KOKCHETAV PROVINCE—LAKES) (MICROBIOLOGY)

NOVOZHILOVA, M.I.; YANOVSKAYA, D.L.; BALKASHEVA, L.U.

Characteristics of microbiological and chemical processes in Lake
Karabotan. Trudy Inst.mikrobiol.i virus.AN Kazkah.SSR 6:106-118
'62. (MIRA 15:8)

(KARABOTAN, LAKE--BATHS, MOOR AND MUD)

12-25-83

ACCESSION NR: A15014065

7R/0000/6S/000/000/0000/0000

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103310016-6

Co gamma radiation). In most cases no essential differences were noted in the

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CIA-RDP86-00513R000103310016-6"

Wrinkled area; 3/ pigment variant green and orange colonies have been observed
and by means of a flat green center and mucous

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BAIKASHINA YE. I.

BALKASHINA, E. I.

"Materials on Genetics and Selection of the Corp. II.

1. The fundamental series of genes of the scales and the problem of Pleiotropism of genes of the corp.
2. Hybrids of the cultivated and the wild corp." (p. 327) by Kirpichnikov, V. S.; and Balkashina, E. I.

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"Effectiveness of Antimalaria Measures in South Kazakhstanskaya Oblast"
Izv. AN KazSSR, No 121, 1954, Ser. Fiziol. i Med. No 2, 65-70

Data on the effectiveness of malaria control with new methods including prolonged treatment courses, measures controlling the carriers, etc. A decrease in the prevalence of malaria is demonstrated in graphs in the original article. (RZhBiol, No 9, May 1955)

SO: Sum-No 787, 12 Jan 56

PANKINA, M.V.; BALKASHINA, Ye.I.

Eliminating malaria in South Kazakhstan Province. Zdrav.
kazakh. 21 no.12:38-40 '61. (MIRA 15:3)

1. Iz Yuzhno-Kazakhstanskoy oblastnoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrach - Ya.A. Klebanov).
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Determination and study of the acetic acid salt of ethionamide
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SO: Monthly List of East European Accessions, (MEAL), IC, Vol. 4, no. 10, Oct. 1955, Uncl.

Specific formation of rock motion, p. 153, FOLDTANI KOZLONY, BULLETIN
OF THE HUNGARIAN GEOLOGICAL SOCIETY, (Magyar Foldtani Tarsulat)
Budapest, Vol. 85, No. 2, Apr./June 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1955

BALNAI, B.

Laszlo Egyed's Geofizikai alapismeretek (Fundamentals of Geophysics); a book review, p. 246, FOLDTANI KOZLONY, BULLETIN OF THE HUNGARIAN GEOLOGICAL SOCIETY, (Magyar Foldtani Tarsulat) Budapest, Vol. 85, No. 2, Apr./June, 1955

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 4, No. 12, December 1955

BALAZS, B.

Recent experiments on the physical properties of rocks.
p. 284. FOLDTANI KOZLONY, BULLETIN OF THE HUNGARIAN
GEOLOGICAL SOCIETY. (Magyar Foldtani Tarsulat) Budapest.
Vol. 86, no. 3, July/Aug. 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress,
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The representation of vector quantities in geology. p. 287.
FOLDTANI KOZLONY. BULLETIN OF THE HUNGARIAN GEOLOGICAL
SOCIETY. (Magyar Foldtani Tarsulat) Budapest. Vol. 86,
no. 3, July/Aug. 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 15, No. 12, December 1956.

BALKAY, B.

Fossil plant remains from the Lower Eocene beds of Dunantul. p. 291.
FOLDTANI LOZLONY. BULLETIN OF THE HUNGARIAN GEOLOGICAL SOCIETY.
(Magyar Foldtani Tarsulat) Budapest, Vol. 86, no. 3, July/Aug. 1956.

SOURCE: East European Accessions List, (EEAL), Library of Congress,
Vol. 5, no. 12, December 1956.

BALKAY, B.

Latest results in investigating methods of making gravel. p. 392

Vol. 85, no. 3, July/Sept. 1955

SOURCE: Monthly list of East European Accessions, (EEAL), Lc, Vol. 5,
No. 3, March 1956

BALKAY, B.; LANG, G.

Sediment-geologic investigations of the Carbon-Perm strata in the area of Nagyvizsnyo-Nekezsény.

P. 3, (Foldtani Kozlony) Vol. 87, no. 1, Jan/Mar. 1957, Budapest, Hungary

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

BALKAY, B.

Crustal structure below Hungary. In English, p. 3

ANNALES. SECTIO GEOLOGICA. Budapest, Hungary, Vol. 2, 1958

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1960
Uncl.

BALKAY, Balint

Microtectonic observation in the western part of the Bukk Mountains.
Foldt kozl 90 no.1:120-124 Ja/Mr '60. (EBAI 9:8)
(Hungary--Geology)

BALKAY, Balint

Structure of the earth's crust in Hungary. Geofiz kozl 9
no.1/2:5-21 '60.

BALKAY, Baliht

About the similarity between the African rifts and that of the Kisalfold.
Geofiz kozl 10 no.1/4:39-43 '62.

БЪЛГАРИЯ, Е. 1.

BULGARIA/Chemical Technology. Chemical Products and Their
Application. Ceramics. Glass. Binding Materials.
Concrete.

H-13

Abs Jour: Ref Zhur-Khim., No 2, 1959, 5564.

Author : Rornanov, Zhechko; Bal'kchiev, Emil Iv.

Inst :

Title : Determination of Exothermy of Cement by Thermos Method.

Orig Pub: Stroitelstvo, 1957, 4, No 5, 10-13.

Abstract: A theoretical explanation of the method of determination of the exothermy of cement recommended by GOST 4798-49 is given. A description and scheme of the installation used by the authors for the determination of the exothermy of cement are presented. It is established that the Bulgarian cements under study answer the re-

Card : 1/2

BULGARIA/Chemical Technology. Chemical Products and Their
Application. Ceramics. Glass. Binding Materials.
Concrete.

H-13

Abs Jour: Ref Zhur-Khim., No 2, 1959, 5564.

quirements of GOST 4798-49 and, consequently, may be
used in substantial constructions. - V. Ryzhikov.

Card : 2/2

72

- Chelovek v usloviyakh vysshogo i kosmicheskogo poteta; sbornik
 Chelovek v usloviyakh vysshogo i kosmicheskogo poteta (Man Under
 Conditions of High-Altitude and Cosmic Flight); Collection of
 Translations from Foreign Periodical Literature (Moscow, 1960,
 111-17, 1960, 462 p. No. of copies printed not given.
- Translator (from German and English): I. I. Gurevich; Ed.: P. F.
 Krut'kov; Tech. Ed.: M. A. Iovleva.
- FOREWORD: This book is intended for medical personnel working on
 problems of aviation and space medicine and for engineer-
 designers, scientists, and other workers in aviation and
 cosmonautics.
- CONTENTS: The collection consists of 26 translations of periodical
 articles (20 American and 6 German) on problems of aviation and
 space medicine originally published in 1956 and 1958. Individual
 articles discuss problems of living conditions in cabins of fly-
 ing vehicles, physiological stresses due to heat, acceleration,
 and noise, toxic hazards, decompression and cosmic irradiation.
 In parentheses are mentioned references accompanying each article.
1. Impact Load Action and Dynamic Reaction of the
 Organism (Stooswirkung und dynamische Reaktion des Körpers,
 "Mitteilungen und Grenzen des bekannten Fluges", 1956, pp.
 85-95)
 Card 2/6 45
2. Impact Thresholds of Brain Concussion (J. Aviat.
 Med., v. 29, 10, pp. 725-732, 1958) 57
3. Possibilities of Combating the Effect of Noise and
 Vibration (Grenzen der Lärm- und Vibrationsbekämpfung,
 "Mitteilungen und Grenzen des bekannten Fluges", 1956, pp.
 25-36) 69
4. Clinical Differentiation Between Hypoxia and
 Hyperventilation (J. Aviat. Med., v. 29, 4, pp. 307-315, 1958) 84
5. and 6. Increased Tolerance to Pressure
 Resulting from Prolonged Breathing Techniques (J. Aviat.
 Med., v. 29, 4, pp. 301-306, 1958) 101
7. Physical and Physiological Qualifications
 for Partial Pressure Suit Training (Paper presented at the
 Second European Congress on Aviation Medicine, Stockholm, 1957) 111
8. Toxic Hazards in the Aviation Environment (J.
 Aviat. Med., v. 29, 9, pp. 641-649, 1958) 121
9. and 10. Oxygen Toxicity in
 Aviation Medicine (J. Aviat. Med., v. 29, 9, pp. 660-667,
 1958) 136
11. Health Hazards of New Aircraft and Rocket
 Propellants (J. Aviat. Med., v. 29, 9, pp. 650-659) 149
- PART II. PROBLEMS OF SPACE MEDICINE
12. Man on a Space Vehicle (USAF Med. J., v. 8, 11,
 pp. 1561-1570, 1957) 167
13. Flight Mechanics in Flying Machines of the Near
 Future (Die mechanische Umwelt in Flugzeug von morgen,
 "Mitteilungen und Grenzen des bekannten Fluges", 1956, pp. 73-
 84) 180
14. Human Factors and Space Cabin Development
 (Paper presented at the American Rocket Society, New York,
 December, 1957) 195
- Card 3/6

DALKLYCH, V L
CA

High-alumina refractories from electromelted corundum. D. N. Potuboyarimov and V. L. Balyayich. *Ogne-
priy 14, 538-54(1946).*—Tests were made of shapes made
from mixes of white electromelted corundum and clay
type and alumina bonds. The corundum (98-99%
Al₂O₃) was added in grains of 0.35 and 0.04 mm. (1:1).
Latua clay (58.1% Al₂O₃) and/or washed Prusyaurovsk
kaolin (43.5% Al₂O₃), separately or in combination, did
not exceed 15%; pure tech. alumina, with and without
silicic acid, of latua clay, MgO, and CaO, was added in amts.
of 15, 30, and 45%. In shapes of clay type bond, the
sintering process continued up to temps. of 1780-1800°;
reheat shrinkage at 1650-1750° amounted to 3-4%;
max. temp. of initial deformation was around 1650°.
Max. temp. for two-side service of these shapes is 1700°
provided they are subjected to a small load or no load at
all. To reach constant vol., firing should be within the
limits of about 1700°. Shapes of alumina bond had better
characteristics. Initial deformation temp. was 1830-
1840°. Admixtures had no noticeable effect; tech.
alumina should be used alone, in amts. of 40-45%, and
calcined at 1480° prior to use. Semidry pressing of
shapes is possible if water content is 6-7%. Firing for
3-5 hrs. at 1700° will insure const. vol. (1700° is min.
firing temp.). Allowable service temp. is 1830-1900°
with no load or only a small load. B. Z. Kamich

BALKEVICH V. L.

181T47

USSR/Engineering - Refractories

Mar 51

"High-Refractory Materials on a Base of Recrystallized Alumina," D. N. Poluboyarinov, V. L. Balkevich, Moscow Order of Lenin Chemicotech Inst imeni D. I. Mendeleev

"Ogneupory" No 3, pp 109-119

Develops method to obtain corundum refractory material from commercial alumina contg about 99% aluminum oxide, based on joint recrystg baking of corundum filler with bond of finely dispersed alumina. Product has good vol constancy to 1,900°, satisfactory thermal resistance, high mech strength, increased corrosion resistance.

181T47

C. A. BALKEVICH, V. L.
1951

Glass, Clay Products, Refractories
Enamelled Metals
19

Highly refractory materials from recrystallized alumina.
1) N. N. Polykov and V. L. Balkevich (D. I. Mendeleev
Chem. Technol. Inst., Moscow). (Zhurnal 18, 100-10
(1951); cf. C.A. 46, 4217g. — Bond was prep. by heating
tech. Al_2O_3 (99% Al_2O_3) to 1450° , wet grinding for 30-40
hrs., and treating with HCl to remove Fe. To obtain grog
of high d. (3.80 g./cc.), this product was briquetted, fired at
1600-1710°, and ground; to obtain grog of lower d. (3.60),
the original tech. Al_2O_3 was wet ground, without prior
heating, briquetted, fired, and ground. Plastic mix was
made with Al_2O_3 slip. Optimum moisture content increased
with increasing amt. of bond and decreasing d. of the grog.
Strength of the green product was increased by the addn. of
1-2% sulfite-cellulose liquor or $Al_2(SO_4)_3$. Mixts. fired at
1710° showed increased shrinkage and bulk wt. and de-
creased water absorption and porosity with increasing bond
content. Partially sintered grog produced a denser body
than grog that was well sintered. Characteristics of the
products were superior to those of electrocorundum with
clay bond. Initial temp. of deformation under 2 kg./sq.
cm. was at 1850°, vol. constancy was high up to 1900°;
visible cracks appeared after 15-16 heat-shock cycles and
brick broke in half after 30 cycles; compressive strength was
as high as 2080 kg./sq. cm. B. Z. Kamich

BALKEVICH, V-L
BCS

Drying

2173. Experience with the combined grinding and drying of clay.—V. L. BALKEVICH, I. S. DUNOVOLSKY and R. M. ZAVOITS (Sov. Kerm., 8, No. 2, 1961). It is stated that the dry-pressing method has been very successful in Russia. New presses produce 4,000–10,000 building bricks/hr. In the plants utilizing the wet-pressing method clay is normally dried in Russia in drum dryers and ground in disintegrators or edge-runner mills. Experience over a year has shown that the drum does not dry clay uniformly. A Russian institute has built and tried out an installation for the simultaneous grinding and drying of clay and this is described. (2 figs., 4 tables.)

BALKEVICH, V. L.

Dec 52

USSR/Engineering - Refractories, Manufacture

"Concerning the Technology of Manufacturing High-Alumina Products," V. L. Balkevich,
Cand Tech Sci, All-Union Sci-Res Inst of Construction Ceramics
Ogneupory, No 12, pp 531-533

In connection with designing plant for production of high-alumina refractories, suggests inclusion of provision for manufacturing specialized products with max high, 96-99.5% content of Al_2O_3 on the basis of utilization of commercial alumina. Reviews 4 methods for obtaining these products and discusses required equipment.

267T65

Card: 11/11, 20-22, Nov 1954

Authors : Balkevich, V. L.

Title : Methods for developing the production of spark-plug insulators

Periodical : Stek. i ker. 11/11, 20-22, Nov 1954

Abstract : The production of the ceramic part of spark plugs for internal combustion engines is dealt with. A study is made of various materials in order to find a composition which will give the highest heat-conductivity and the best insulation. The method of experiment is described. The less expensive than standard the part is made. (See references (1949 and 1950).)

Institution:

Submitted:

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103310016-6

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000103310016-6"

used in electrolyzers should be as dense as possible, with
magnesium or bit being used as electrolyte liners. Since
this composite will be used as a separator between the

BALKEVICH, V.L.

Cast alumina spark plugs. Trudy NIISTroi keramika no.10:187-196
'55. (Spark plugs) (MIRA 9:6)

MANUYLOV, L.A.; KLYUKOVSKIY, G.I.; GEZBURG, A.A.; BALKEVICH, V.L., kandidat
tekhnicheskikh nauk, redaktor; TYUTYUNIK, M.S., redaktor; LYUDKOVSKAYA,
E.I., tekhnicheskiiy redaktor.

[Practical laboratory work in the technology of silicates] Laborator-
nyi praktikum po tekhnologii silikatov. Pod.red.V.L.Balkevicha. Moskva,
Gos.isd-vo lit-ry po stroit. materialam, 1955. 346 p. (MLRA 9:5)
(Silicates)

00000103310016-6"

AUTHORS:

Balkevich, V.L., Gol'dberg, S.M.

131-58-4-9/17

TITLE:

Accelerated Control Method of Burning Powdery Technical Alumina
(Uskorennyy metod kontrolya obzhiga poroshkoobraznogo
tekhnicheskogo glinozema)

PERIODICAL:

Ogneupory, 1958, Nr 4, pp. 172-175 (USSR)

ABSTRACT:

The degree of condensation of technical alumina in burning is connected with the modification transformation of γ -alumina into the α -form as well as with the condensation of individual alumina-spherulithes at high temperatures. Usually the specific weight of α -alumina is given as being 3.99-4.01 g/cm³ and that of γ -alumina as being 3.47 g/cm³. Table 1 mentions values given in publications without, however, giving a more detailed description of the method of determination. The milieu, however, in which the specific weight of the alumina was determined, exercises considerable influence on the measuring result. A number of authors, when investigating the dependence of alumina properties on the temperature of burning, found that the modification of the filling weight is governed by certain rules (see table). G.A. Vydrik determined the filling weight

Card 1/3

Accelerated Control Method of Burning Powdery
Technical Alumina

131-58-4-9/17

of alumina with the exclusion of the pore volume between the spherulithes (assumed to be 62%), and obtained $1,76 \text{ g/cm}^3$ for not burnt alumina (up to 1750°), and $2,32 \text{ g/cm}^3$ for burnt alumina (up to 1750°). The absolute values of the filling weights of alumina when burnt at equal temperatures do, however, not agree, which may be explained by different powder dispersion, the shape of particles, and the difference in the methods of determination. Fig. 1 shows the modification of the specific- and of the filling weight of alumina in dependence on burning temperature. The accelerated method of determining the condensation of alumina is based on a comparative modification of its filling weight during burning, which depends on the modification of the specific weight and the condensation of individual spherulithes. Furthermore, the determination of the specific and of the filling weight is described. The filling weight of alumina is carried out by means of a device shown in fig. 2 in form of a schematical drawing. Table 2 gives the values of the filling weight of alumina at different burning temperatures and determined by the recommended method. These filling weights may be used for the purpose of characterizing the degree of condensation of alumina during burning. There are 2

Card 2/3

Accelerated Control Method of Burning Powdery
Technical Alumina

131-58-4-9/17

figures, 3 tables, and 5 references, 2 of which are Soviet.

ASSOCIATION: Khimiko-tekhnologicheskii institut im. Mendeleyeva (Chemical-
Technological Institute imeni Mendeleyev)

Card 3/3

BALKEVICH, V.L.; ANTROPOV, V.A.

Effect of the additives on the relation between temperature and
electric conductivity of corundum ceramics. Trudy MKHTI no.27:
232-246 1959. (MIRA 15:6)

(Corundum—Electric properties)

BALKEVICH, V. L.

PHASE I BOOK EXPLOITATION

SOV/4301

Poluboyarinov, Dmitriy Nikolayevich, Professor, Viktor L'vovich Balkevich,
and Rafail Yakovlevich Popil'skiy

Vysokoglinozemistyye keramicheskiye i ognepurnyye materialy (High-Alumina
Ceramic and Refractory Materials) Moscow, Gosstroyizdat, 1960. 231 p.
Errata slip inserted. 3,000 copies printed.

Ed.: Dmitriy Nikolayevich Poluboyarinov, Professor; Ed. of Publishing House:
M.A. Guzman; Tech. Ed.: Ye.L. Temkina.

PURPOSE: This book is intended for scientific, engineering and technical personnel
in the building materials industry. It may also be used in schools of higher
education.

COVERAGE: The book discusses the present state and the physicochemical bases of
the technology of producing articles of high alumina content by ceramics methods.
A review is given of the properties of high-alumina ceramics used in various
branches of technology. These include refractory, electrical insulating, building,
and chemically resistant materials. The book attempts to generalize the theo-
retical and processing research in this field performed by personnel of the
Kafedra tekhnologii keramiki i ogneporov of the Moskovskiy ordena Lenina khimiko-
Card 1/4

High-Alumina Ceramic (Cont.)

SOV/4301

tekhnologicheskii institut imeni D.I. Mendeleeva (Department of Technology of Ceramics and Refractories of the Moscow "Order of Lenin" Institute of Chemical Technology imeni D.I. Mendeleev). Materials from Soviet literature, principal non-Soviet research, and the experiments of industrial enterprises are extensively used. No personalities are mentioned. There are 323 references: 258 Soviet, 58 English, and 7 German.

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1. Natural aluminosilicates	5
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Ch. II. Pospelov, D.N., Doctor of Technical Sciences, Professor. Physicochemical Processes Underlying the Production of High-Alumina Ceramics	
1. Principal conditions	29
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Card 2/4	

BALKEVICH, V.L., kand.tekhn.nauk; POPIL'SKIY, R.Ya., kand.tekhn.nauk

Ceramic materials of a high alumina content and their use in the
national economy. Zhur. VKHO 5 no. 2:148-155 '60.

(Ceramic materials)

(MIRA 14:2)

BLOKH, G.S., kand. tekhn. nauk; CHERNYAK, Ya.N., kand. tekhn. nauk;
BALKEVICH, V.L., kand. tekhn. nauk; GAK, B.N., kand. tekhn.
nauk; KORDONSKAYA, R.K., kand. tekhn. nauk; REMPEL', A.M.,
kand. tekhn. nauk; ZHUKOV, D.V., nauchnyy red.; YUSHKEVICH,
M.O., red. toma; SKRANTAYEV, B.G., glav. red.; BALAT'YEV,
P.K., red.; KITAYEV, Ye.N., red.; KITAYGORODSKIY, I.I., red.;
KRZHEMINSKIY, S.A., red.; ROKHVARGER, Ye.L., red.; KHOLIN, I.I.,
red.; GURVICH, E.A., red. izd-va; SHERSTNEVA, N.V., tekhn. red.

[Handbook on the manufacture of structural ceramics] Spra-
vochnik po proizvodstvu stroitel'noi keramiki. Moskva, Gos.
izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam.
Vol.1. [General information and production control] Obshchie
svedeniia i kontrol' proizvodstva. Pod red. M.O. Iushkevicha.
1961. 464 p. (MIRA 15:2)

(Ceramics) (Building materials)

TROSTYANSKAYA, Ye.B.; SHISHKIN, V.A.; SIL'VESTROVICH, S.I.; PANTELEYEV,
A.S.; POLUBOYARINOV, D.N.; BALKEVICH, V.L.; NATANSON, A.K.;
KOLACHEV, B.A.; PETROV, D.A.; GOL'DBERG, M.M.; SHAROV, M.Ya.,
inzh., retsenzent; KITAYGORODSKIY, I.I., doktor tekhn. nauk,
prof., retsenzent; LIVANOV, V.A., kand. tekhn. nauk, prof.,
retsenzent; TROSTYANSKAYA, Ye.B., red.; BABUSHKINA, S., ved.
red.; TITSKAYA, B.F., ved. red.; VORONOVA, V.V., tekhn. red.

[New kinds of materials in engineering and industry] Nove materialy v tekhnike. Pod red. Trostianskoi E.B., Kolacheva,
B.A., Sil'vestrovicha S.I. Moskva, Gostoptekhizdat, 1962.
656 p.

(Materials)

(MIRA 16:2)

BALKEVICH, V.L.; KRASNOUSOVA, A.S.

Dependence of certain electrophysical properties on the Al_2O_3
content in materials of mullite-corundum composition. Trudy
MKHTI no.37:157-165 '62.
(MIRA 16:12)

BALKEVICH, V.L.; SEROVA, G.A.

Methods of evaluating the structure of carborundum heaters. Trudy
MKHTI no.37:180-184 '62.
(MIRA 16:12)

Code 117

11. 11. 11

ANALYSIS IN NR APP. 11. 11

were fired at 11. 11. The main effect of the firing was a considerable increase in shrinkage of the samples. Experiments on the effect of mineralizing agents (FeCl₃, H₂O₂, H₂SO₄) by impregnation of the samples before firing showed the presence of additional shrinkage of the fired samples. (See attached).

SUB CODE: MT

END

SUB CODE: MT

Card 2/2

ACC NR: AT6036932

SOURCE CODE: UR/0000/66/000/000/0106/0109

AUTHORS: Balkevich, V. L.; Stoyanov, Yu. I.

ORG: none

TITLE: Installation for determining electrical conductivity of oxide ceramics at high temperatures in vacuum

SOURCE: Nauchno-tekhnicheskoye obshchestvo chernoy metallurgii. Moskovskoye pravleniye. Vysokoognepornyye materialy (Highly refractory materials). Moscow, Izd-vo Metallurgiya, 1966, 106-109

TOPIC TAGS: corundum, corundum refractory, electric conductivity, aluminum oxide, chromium oxide, pump, oil transformer/ MN-40 pump, RVN-20 pump, RNO-250-10 oil transformer

ABSTRACT: An installation for the determination of electrical conductivity of oxide ceramics at high temperature in vacuum was developed. The installation consists of; 1) high-temperature vacuum furnace equipped with tungsten heaters; 2) sample holder; 3) forevacuum pump RVN-20; 4) device for measuring electrical resistance; 5) oil diffusion pump MN-40; 6) vacuum gage VIT-1; 7) step-down transformer; 8) regulating oil transformer RNO-250-10. A schematic of the installation is presented. The installation was used for determining the specific electrical resistivity of pure aluminum oxide and of aluminum oxide (containing known amounts of Cr_2O_3) over the

Card 1/3